Ammonia by ISE
SM 19th Ed. 4500-NH3 D

Facility Name:_____VELAP ID_____

Assessor Name:_____ Analyst Name:_____ Inspection Date_____

Relevant Aspect of Standards	Method Reference	Y	N	N/A	Comments
Records Examined: SOP Number/ Revision/ Date _____ Analyst:_____ Sample ID: _____ Date of Sample Preparation:_____ Date of Analysis:_____					
Are standard solutions and samples analyzed at the same temperature, about 25°C?	,4500-NH_3 D.4.b				
Are samples to be analyzed within 24 hours refrigerated at 4°C?	4500-NH_3 D.1.d				
Are samples to be analyzed after 24 hours or are high in nitrogenous or organic matter preserved by reducing to pH≤2 with H2SO4 and refrigerating at 4°C?	4500-NH_3 D.1.d				
Is the pH meter capable of 0.1 mV resolution between -700 mV and +700 mV, or is a specific ion meter used?	4500-NH_3 D.2.a				
Is ammonia-free water used for making all reagents?	4500-NH_3 D.3.a				
Are a series of working standards prepared in a range between 0.1 and 1000 mg/L?	4500-NH_3 D.4.a				
Is the meter calibrated using 100 mL of each standard in a 150 mL beaker, starting with the lowest standard and proceeding from lowest to highest concentration?	4500-NH_3 D.4.b				
Is the electrode immersed and the sample mixed constantly with a magnetic stirrer in a manner that prevents entrainment of air bubbles into the solution or onto the membrane?	4500-NH_3 D.4.b				
If the presence of mercury or silver was possible, was NaOH/EDTA solution used in place of NaOH solution?	4500-NH_3 D.1.d 4500-NH_3 D.4.b				
AFTER immersing the electrode, is a sufficient amount of 10N NaOH added to each sample to raise pH about 11?	4500-NH_3 D.4.b				
For samples containing ≤ 1 mg/L ammonia, is at least 2 minutes allowed before recording millivolts?	4500-NH_3 D.4.b				
Note/Comments:					

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Was a standard curve plotted on a semilogrithmic graph with ammonia concentration on the log axis and millivolts on the linear axis?	4500-NH_3 D.4.c				
Was the standard curve plotted with the lowest concentration on the bottom of the scale?	4500-NH_3 D.4.c				
Does a tenfold change of ammonia concentration produce a potential change of about 59 mV?	4500-NH_3 D.4.c				
For sample measurement, are volumes added in excess of 1 mL for 10N NaOH recorded?	4500-NH_3 F.4.e				
Are samples diluted to fall within the calibration curve range if necessary?	4500-NH_3 D.4.e				
Notes/Comments:					